Net Shape Rapid Manufacturing Using Nano Encapsulated Powders, Phase I

Completed Technology Project (2005 - 2006)

Project Introduction

The objective of this STTR is to determine the capability of Net Shape LENS processing with Nano-coated powders. The unique composites produced using regualr processing and these powders ahs provided unique material properties. The use of nano-coated powders witht he rapid prototype LENS process should also provide unique data.

Anticipated Benefits

Coomercial appliations include automotive, aerospace, thermal control areas, electronics to name a few.

Primary U.S. Work Locations and Key Partners
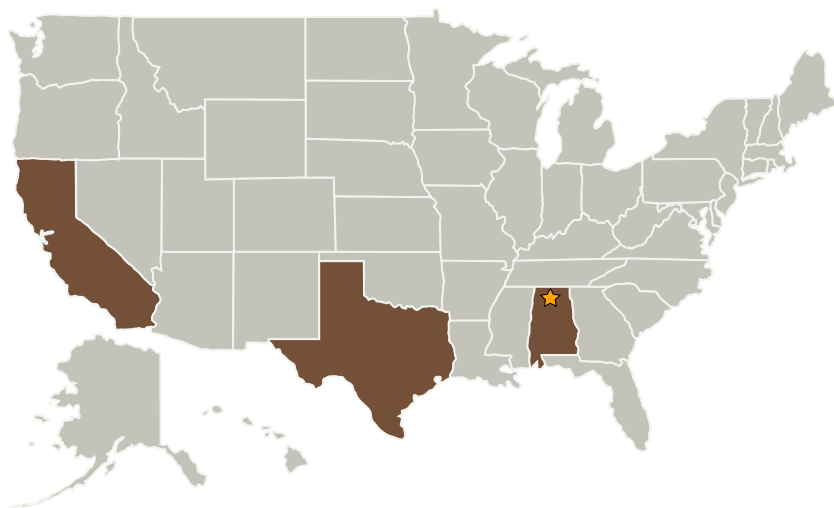
Organizations Performing Work	Role	Type	Location
⭐Marshall Space Flight Center(MSFC)	Lead Organization	NASA Center	Huntsville, Alabama
Advanced Powder Solutions	Supporting Organization	Industry	Cypress, Texas
University of California-Davis(UC Davis)	Supporting Organization	Academia	Davis, California

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Table of Contents

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Marshall Space Flight Center (MSFC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Primary U.S. Work Locations	
Alabama	California
Texas	

Project Management

Program Director:
Jason L Kessler

Program Manager:
Carlos Torrez

Project Manager:
Curtis W Manning

Principal Investigator:
Dean M Baker

Technology Areas

Primary:

- TX12 Materials, Structures, Mechanical Systems, and Manufacturing
  └ TX12.4 Manufacturing
    └ TX12.4.1 Manufacturing Processes